

## **APPENDIX L**

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

February 25, 1998

- 10:00 a.m. Welcome and Introductions
- 10:15 a.m. Description of Source Water Assessment Program (SWAP)
- 10:45 a.m. Review SWAP Development Approach
- 11:00 a.m. Review SWAP Supporting Activities
- 11:15 a.m. General Discussion
- 11:55 a.m. Set Next Meeting Date



## COMMONWEALTH of VIRGINIA

RANDOLPH L. GORDON, M.D., M.P.H.  
COMMISSIONER

Department of Health  
P O BOX 2448  
RICHMOND, VA 23218

TDD 1-800-828-1120

### MEMORANDUM

DATE: March 3, 1998

TO: Source Water Assessment Technical and Citizens Committee (TAC)

FROM: *Jerry Peaks*  
Jerry Peaks

SUBJECT: February 25, 1998 Meeting Minutes

The subject meeting was held at Sydnor Hydrodynamics, Inc. An agenda was provided to all attendees. Handouts included the EPA document entitled "State Source Water Assessment and Protection Programs Guidance", a December 17, 1997 letter with attachments to Dale Long at EPA and an excerpt (pages 18 and 19) of the VDH Set-Aside Workplan. Highlights of each handout was discussed and the conceptual approach VDH would like to take relative to preparing a Source Water Assessment Program (SWAP) was described. The letter to Dale Long and the excerpt from the Workplan describes this concept.

The TAC member list has not been finalized at this time but will be prior to the next meeting. It is expected that the next meeting will be in late April and that recommendations from the Source Water Protection Team will be available for discussion. It was suggested that the TAC review the handouts prior to the next meeting.

Attachment

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

April 30, 1998

- 10:00 a.m. Welcome and Introductions
  - 10:10 a.m. Quick Review of SWAP Process
  - 10:30 a.m. Report on Source Water Protection Team's Delineation Recommendations
  - 11:30 a.m. Report on Source Water Protection Team's Inventory Deliberations
  - 12:00 noon Box Lunch Provided
  - 12:30 p.m. Discussion of Key Issues from Tables 1, 2 and 3 as applicable of the *Final*  
Guidance Document
  - 1:30 p.m. General Discussion of Susceptibility Determinations
  - 2:30 p.m. Adjourn
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## COMMONWEALTH of VIRGINIA

*Department of Health*

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### MEMORANDUM

DATE: May 4, 1998

TO: Source Water Assessment Technical and Citizens Committee (TAC)

FROM: Jerry Peaks *Jerry Peaks*

SUBJECT: April 30, 1998 Meeting Minutes

The subject meeting was held at Sydnor Hydrodynamics, Inc. An agenda was previously provided to all attendees. Handouts included minutes from the SWAP TEAM meeting of April 22, 1998 and a DRAFT Source Water Assessment Program (SWAP) document.

The minutes of the TEAM meeting may be useful in documenting some of their deliberations relative to conceptual and technical issues that the TAC will also consider. The DRAFT Source Water Assessment Program document is the very rough beginning of the SWAP that will be submitted to EPA for approval by February 1999. The goal is to receive concurrence from the TAC, the TEAM and the Waterworks Advisory Committee (WAC) on the final SWAP product. Comments on the DRAFT would be appreciated very much.

The major discussions of the meeting involved the TEAM's initial recommendations relative to delineation criteria. These discussions were extremely productive. No final decisions were made or expected on the delineation criteria. Various members of the committee were asked or volunteered to provide clarifying language to some of the criteria. Attached is a second draft of the criteria based on my understanding of the discussion. In addition, some members suggested that consideration be given to having two (2) zones of delineation for groundwater sources. It was suggested that "due to previous experience with EPA", they might more readily grant their favor if both groundwater and surface water had two (2) zones. It was mentioned that with GIS layers this could be readily done. However, some cautioned that having two (2) zones for surface sources was expressly mentioned in EPA guidance and that there was no obvious technical merit to two (2) zones for groundwater sources. A firm suggestion on what distance to use to delineate the boundary of the second zone was not agreed upon, however, twice the distance was mentioned. It was suggested that this issue be taken back to the TEAM for their input.

Memorandum

May 4, 1998

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The committee discussed in general terms the nature of the inventory step of the process and generally (but not finally) agreed that an inventory of land uses/activities of potential "significant" sources of contamination would be accomplished. The actual significance of the individual potential sources of contamination would be considered in the next step of the process, i.e., the Susceptibility Determination. A first draft list/table of potential sources of contamination was discussed. This draft is very preliminary as neither the TAC nor the TEAM had opportunity to review and discuss in any detail. I am requesting that comments be sent to me prior to the next meeting and that the committee be prepared to discuss inventory issues at the next meeting.

The committee also discussed in general terms the Susceptibility Determination issue. Members were asked to provide me with any information they had relative to performing Susceptibility Determinations (vulnerability analysis etc.) on any related parameter.

The following dates are offered for the next meeting:

June 8, 9, 10, 15, 17, 18

Please let me know as soon as possible which dates that you could not attend.

Attachment

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

June 9, 1998

- 10:00 a.m. Welcome and Introductions
- 10:10 a.m. Report on TAC's Delineation Recommendations to the Source Water Protection Team
- 10:45 a.m. Report on TAC's Inventory Recommendations to the Source Water Protection Team
- 11:30 a.m. Discussion of Key Issues from Tables 1, 2 and 3 as applicable of the Final Guidance Document
- 12:00 noon Box Lunch Provided
- 1:30 p.m. Continued Discussion of Susceptibility Determinations
- 2:30 p.m. Adjourn

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

June 30, 1998

- 10:00 a.m. Welcome and Introductions
- 10:10 a.m. Continue discussion of Delineation Recommendations to the Source Water Protection Team
- 10:45 a.m. Continue discussion of Inventory Recommendations to the Source Water Protection Team
- 11:30 a.m. Discussion of Key Issues from Tables 1, 2 and 3 as applicable of the Final Guidance Document
- 12:00 noon Box Lunch Provided
- 1:30 p.m. Continued Discussion of Susceptibility Determinations
- 2:30 p.m. Adjourn





## COMMONWEALTH of VIRGINIA

*Department of Health*

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### MEMORANDUM

DATE: July 1, 1998

TO: Source Water Assessment Technical and Citizens Committee (TAC)

FROM: Jerry Peaks *Jerry Peaks*

SUBJECT: June 9 and June 30, 1998 Meetings Minutes

The subject meetings were held at Sydnor Hydrodynamics, Inc. Agendas were previously provided to all attendees. Handouts included numerous articles/information relative to Susceptibility Determination, a DRAFT Source Water Assessment Program (SWAP) document dated June 1998, and a revision to the list of Potential Sources of Contamination that included a second list of Potential Conduits.

At the June 30<sup>th</sup> meeting, revisions that were made following the June 2<sup>nd</sup> meeting were included in handouts of two tables for Land Use/Activity Inventories plus a revised delineation criteria sheet. Also, a list of Susceptibility Determination "brainstorming" ideas from the TEAM was handed out. The major discussions of the meeting involved the recommendations relative to delineation criteria. These discussions were extremely productive and the attached criteria reflects the consensus of the TAC.

The committee continued the discussion of the Land Use/Activity Inventory lists which are now Tables 1 and 2, Land/Use Activity Inventory and Potential Conduits to Groundwater, respectively. It was suggested that a 3<sup>rd</sup> Table be developed for the Transient-Noncommunity systems to prevent confusion. We are expecting to continue polishing these tables by adding some "threshold quantities" to some of the line items. Sarah has promised to provide stocking rates, etc. for some of the livestock line items and David Ormes with DEQ will be contacted regarding fuel oil tank sizes. Also Lynn indicated at the June 9<sup>th</sup> meeting that he had some suggestions on the Resource Extraction list. In general, the consensus was that the tables reflected the wishes of the TAC to this point in the process. A suggestion was made to consider the Standard Industrial Classification (SIC) Codes as a means to tie our listed items to a recognized standard. The standards may also assist the people performing the inventories in some manner. It was agreed to task the TEAM in this evaluation.

Memorandum  
July 1, 1998  
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The committee also continued discussion in general terms of the Susceptibility Determination issue. Most of the discussion was sharing of background information, brainstorming and general concept building. Some of the notable comments included: to keep it relatively simple, develop a reasonable "ranking" system to limit subjectivity, if a point system is developed to consider weighting some of the parameters higher than others. It was agreed that the TEAM should be tasked with developing a "strawman(s)" for evaluation/comments by the TAC.

Attachments

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda  
~~Sept. 18~~  
~~August 27, 1998~~

- 10:00 a.m. Welcome and Introductions
- 10:10 a.m. Discussion of revisions to the Delineation criteria language for GWUDIS
- 10:45 a.m. Discussion of Inventory Recommendations from the Source Water Protection Team (SIC codes) and further comments on inventory line items
- 11:30 a.m. Discussion of Key Issues from Tables 1, 2 and 3 as applicable of the Final Guidance Document
- 12:00 noon Box Lunch Provided
- 1:00 p.m. Discussion of Susceptibility Determinations recommendations from the Source Water Protection Team
- 2:30 p.m. Adjourn



## COMMONWEALTH of VIRGINIA

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### MEMORANDUM

DATE: September 22, 1998

TO: Source Water Assessment Technical and Citizens Committee (TAC)

FROM: Jerry Peaks *Jerry Peaks*

SUBJECT: September 18, 1998 Meetings Minutes

The subject meeting was held at Sydnor Hydrodynamics, Inc. Handouts included a revised Delineation Criteria Sheet dated 8/17/98, revised Tables 1, 2 & 3 dated 8/18/98, and information provided by Sarah relative to water assessments for agricultural activities.

The TAC concurred with the revised delineation criteria dated 8/17/98 with the addition of "or other sources" following "GIS layers available from other regulatory authorities".

The TAC also concurred with the TEAM's recommendation to use the original style for Tables 1-3, Land Use Activities, with the addition of appropriate NAIC codes for informational purposes. Additionally, the changes made to Table 3 relative to Andrew Stone's letter was acceptable.

The committee continued the discussion of the Land Use/Activity Inventory lists, Tables 1,2 and 3. We are expecting to continue polishing these tables by adding some line items. We are no longer considering stocking rates, etc. for the livestock line item "Pasture (grazing)". The TAC feels that we should inventory all pastures. We have not heard from Lynn relative to suggestions on the Resource Extraction list. The attached Tables 1, 2, and 3 reflect changes suggested at the meeting. In general, the consensus was that the tables reflected the wishes of the TAC to this point in the process.

Tables 1, 2, and 3 of Key Issues found in the SWAP Guidance document were discussed and responses suggested. Attached is a draft dated October 1, 1998 of the responses.

Memorandum  
September 22, 1998  
Page 2

The committee discussed the draft groundwater Susceptibility Determination dated 8/13/98 provided by the TEAM. The TAC, in general, supported this style of Susceptibility Determination. A number of suggestions were made for the TEAM to further consider such as:

- For Water Quality, 1. GWUDISW, consider using whatever rating system is developed for surface water to establish Low, Moderate, High.
- Continue to consider microbiological levels for Water Quality, 2. Contaminant Detection.
- For Source Construction Details change Wells: casing and/or grout depths do not meet Regulations to 50 points (note springs, etc. 50 points).
- For Land Use/Health Risk, consider well and spring flow rates in terms of gallons per day instead of gallons per minute. This gets to the flow and duration issues.
- Total point Summary should have Water Quality removed, as it currently has no point value(s) assigned.

Dave, Terry and Terri will consider a variation in points assigned to the Geological Data (geological formations) to provide to the TEAM.

The next TAC meeting will be October 22, 1998.

Attachments: Revised Tables 1, 2, and 3 dated October 1, 1998  
Revised Key Issues (Tables 1, 2, and 3) dated October 1, 1998

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

October 22, 1998

- 10:00 a.m. Welcome and Introductions
- 10:10 a.m. Handout revised SWAP dated 10-98
- 10:30 a.m. Review September 18, 1998 minutes
- Request TAC's concurrence on Inventory Tables to this point
  - Request TAC's concurrence of Key Issues responses from Tables 1, 2, and 3
- 11:00 a.m. Discussion of Susceptibility Determinations transmitted by memo of October 5, 1998
- 12:00 noon Box Lunch Provided
- 1:30 p.m. Discuss Tables for LUAs with Relative Risk Factors
- 2:30 p.m. Handout Key Issues responses from Tables 4, 5, and 6 – comments due at November 5<sup>th</sup> meeting
- 3:00 p.m. Adjourn – Next Meeting November 5, 1998



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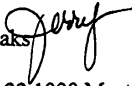
Department of Health

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MEMORANDUM

DATE: November 2, 1998  
TO: Source Water Assessment Technical and Citizens Committee (TAC)  
FROM: Jerry Peaks   
SUBJECT: October 22 1998 Meetings Minutes

The subject meeting was held at Sydnor Hydrodynamics, Inc. Handouts included revised Land Use Activity Tables 1 & 2 that included contaminants expected and risk factors, Pennsylvania Source Water Assessment October 1998 Working Points and Key Issues Tables 4, 5, & 6.

The TAC concurred with the revised Land Use Activity Tables 1 & 2 with suggested changes.

Tables 1, 2, and 3 of Key Issues found in the SWAP Guidance document were concurred with by the TAC.

The committee discussed the draft Susceptibility Determination that was based on Arizona's protocol that has been provided by the TEAM. The TAC concurred with using this style of Susceptibility Determination. A number of suggestions were made for the TEAM to further consider.

Dave, Terry and Terri will consider the groundwater areas to be listed as sensitive in Step 1.

The next TAC meeting will be November 5, 1998.

Attachments: Revised Tables 1, 2, and 3 dated CR 10/28/98  
Revised Susceptibility Determination dated CR 10/28/98  
November 5, 1998 Agenda

Source Water Assessment Technical and Citizens Advisory  
Committee (TAC)

Agenda

November 5, 1998

- 10:00 a.m. Welcome
- 10:10 a.m. Review October 22, 1998 minutes
- 10:20 a.m. Review minor changes to Inventory Tables based on TAC's suggestions
- 10:30 a.m. Discussion of changes Susceptibility Determination
- 11:30 a.m. Discuss Key Issues responses from Tables 4, 5, and 6
- 12:00 noon Box Lunch Provided
- 1:30 p.m. Discuss Chapter V-Making Assessments Available to the Public
- 2:00 p.m. Discuss SWAP Fact Sheet
- 3:00 p.m. Adjourn





## COMMONWEALTH of VIRGINIA

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### MEMORANDUM

DATE: November 20, 1998  
TO: Source Water Assessment Technical and Citizens Committee (TAC)  
FROM: Jerry Peaks *Jerry Peaks*  
SUBJECT: November 5<sup>th</sup> and 17<sup>th</sup> Meetings Minutes

The subject meetings were held at Sydnor Hydrodynamics, Inc. Handouts at the November 5<sup>th</sup> meeting included revised Land Use Activity Tables 1 & 2 dated CR 10/28/98, the Susceptibility Determination Section dated CR 10/28/98 and Key Issues Tables 4, 5, & 6. These handouts were previously attached to the October 22, 1998 minutes.

Handouts at the November 17, 1998 meeting included the attached revised Land Use Activities Tables 1, 2 & 3 dated 11/16, a revised Susceptibility Determination Section dated 11/16, and a revised Section V-Making Assessments Available to the Public. Previously faxed to the TAC were the Key Issues Tables 4, 5 and 6 responses.

The TAC concurred with the revised Land Use Activity Tables 1, 2 & 3 without any further suggested changes.

The TAC concurred with the draft Susceptibility Determination with minor editorial changes.

Responses to Tables 4, 5, and 6 of Key Issues found in the SWAP Guidance document were concurred with by the TAC with minor changes recommended.

Section V was discussed and the attached revision reflects/resolves the concerns/comments of the TAC.

The attached one page announcement has been developed and will be widely distributed.

It was the general consensus that the TAC has completed its duties until after the public meetings scheduled for January 1999.

GWP/teh

Attachments: Revised Tables 1, 2, and 3 dated 11/16/98  
Revised Susceptibility Determination dated 11/16/98  
Revised Section V-Making Assessments Available to the Public  
Virginia's Source Water Assessment Program One Page Flyer

TAC AGENDA-NOV.17,1998

REPORT ON EPA REGION 3 STATES MEETING

REVIEW CHANGES TO LAND USE INVENTORY TABLES

REVIEW CHANGES TO SUSCEPTIBILITY DETERMINATION PROCEDURE

REVIEW CHANGES TO SECTION 5 MAKING ASSESSMENTS AVAILABLE TO THE PUBLIC

REVIEW REVISIONS TO KEY ISSUES TABLES 4,5 & 6, RESPONSES

HANDOUT SWAP PUBLIC MEETING ANNOUNCEMENT FLYER